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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/796,456	03/09/2004	Gary Lee Bartley	03-AE8-122	2401

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Eaton Corporation
Patent Law Department
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EXAMINER

LORENCE, RICHARD M

ART UNIT PAPER NUMBER

3681

DATE MAILED: 06/09/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/796,456

Applicant(s)

BARTLEY ET AL.

Examiner

Richard M. Lorence

Art Unit

3681

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 March 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6 and 8 is/are rejected.
- 7) ☒ Claim(s) 7 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 3/9/04.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

This is the first Office action on the merits of Application No. 10/796,456 filed on March 9, 2004. Claims 1-8 are currently pending.

Claim Objections

Claim 1 is objected to because of the following informalities: Lines 6-7 are unclear regarding the angle. It is believed that in line 7 "longitudinal central axis" should read - - center - - in order to be consistent with the description at lines 13-14. Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 8 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 8 recites the limitations "said first slots" and "said second slots" in lines 1-2. There is insufficient antecedent basis for these limitations in the claim. It is suggested that the dependency of the claim be changed so as to depend from claim 7, rather than claim 1.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1 and 2 are rejected under 35 U.S.C. 102(b) as being anticipated by Stieber '365. The '365 patent to Stieber discloses a coupling assembly which as seen in Figure 7 includes a base 54, a member 51 rotatable relative to the base and a roller thrust bearing assembly which transmits force between the member and the base. The roller thrust bearing assembly includes a disc 57 and a plurality of roller bearings 52 disposed in an annular array of spaced apart slots 57. Note particularly the embodiment depicted in Figure 3 where each of the slots has a longitudinal central axis which is skewed at an angle w relative to a disc radius. Each of the plurality of bearings has a central axis which extends parallel to the longitudinal central axis of the slot.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Allan et al. '458 in view of Eveland '287. The '458 patent to Allan et al. discloses a coupling device including a base 44, a member 34 rotatable relative to the base and a roller thrust bearing assembly 42 which transmits force between the member and the base. The roller thrust bearing assembly includes a disc 46 and a plurality of roller bearings 50 disposed in an annular array of spaced apart slots which are skewed at an angle relative to a disc radius. In Allan et al. only a single roller occupies each of the slots. Eveland provides evidence that it was known at the time the invention was made to form a roller thrust bearing assembly of a disk *a* having a plurality of slots *b* each of which contains a plurality of coaxially arranged rollers *c* having end surfaces in engagement with one another as shown in Figure 1. Eveland suggests that such an arrangement is functionally equivalent to the arrangement shown in Figure 2 wherein a single roller is disposed in each slot. It would have been obvious to one having ordinary

skill in the art at the time the invention was made to provide plural rollers in the slots of Allan in view of the suggestion of Allan et al. that such an arrangement is functionally equivalent.

Regarding claim 4 the number of bearings utilized is deemed to have be dependent upon the amount of force to be transmitted, the diameter of the disk, and other design considerations. It would have been obvious to one having ordinary skill in the art at the time the invention was made to select an appropriate number of rollers.

Regarding claim 5 applicant admits at lines 11-14 of page nine that the desirable ratio was known at the time the invention was made. It would have been obvious to one having ordinary skill in the art at the time the invention was made to utilize the previously determined desirable ratio in order to optimize the brake torque.

Allowable Subject Matter

Claim 7 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claim 8 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Information Disclosure Statement

The remainder of the prior art cited by applicant in the IDS filed on March 9, 2004 has been considered.


Prior Art Citation

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The examiner further cites Smith '633, Kaye '458, Hart '386 and Mimura '363, each of which show roller thrust bearings.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Richard M. Lorence whose telephone number is (571) 272-7094. The examiner can normally be reached on Mondays through Fridays from 9:00AM to 5:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles A. Marmor can be reached on (571) 272-7095. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Richard M. Lorence
Primary Examiner
Art Unit 3681

Lorence/rml